

HUNGARY

SZOKÉ, Szabolcs, Dr; Megye Hospital, Surgical Ward (Megyei Korhaz, Sebeszeti Osztály), (chief physician-in-charge: SZOKÉ, Szabolcs, Dr), Salgotarjan.

"A Surgical Case of an Echinococcus Cyst."

Budapest, Magyar Sebeszet, Vol XVI, No 3, June 1963, pages 182-184.

Abstract: [Author's Hungarian summary] The author discusses some diagnostic aspects of fundamental importance in connection with echinococcus cysticus and describes a case which was observed by him. The previously diagnosed cyst of a 36 year-old woman was removed surgically with success. The patient is completely healed and is without complaints. 1 Hungarian, 3 Western references.

1/1

SZOKÉ, Tamas, dr.; HAFFNER, Zsolt, dr.; KOMAR, Jozsef, dr.

Cancer of the gallbladder causing Guillain-Barre syndrome.  
Ideggyogy. szemle 16 no.11:321-327 N '63.

1. Fovarosi Istvan Korhaz Idegosztalyanak (foorvos: Dr. Lehoczky  
Tibor egyetemi tanar) kozlemenye.  
(POLYRADICULITIS) (GALLBLADDER NEOPLASMS)  
(NEOPLASM METASTASIS) (SPINAL CORD NEOPLASMS)  
(PATHOLOGY) (PULMONARY EMBOLISM)

Sz. Nagy, Béla. Spektraldarstellung linearer Trans-

formationen. (Spectral representation of linear transformations.)  
Berlin, 1953. viii, 170 p. 24 cm.  
Includes bibliographical references.

It is shown that if  $A$  is a bounded linear transformation in a Banach space, then there exists a unique set of minimizing sequences with respect to  $A$  such that the function  $f_A$  is convergent. The positive sequences are called the spectrum of  $A$ . The spectral representation theorem is obtained by applying the spectral representation theorem for bounded positive transformations to the field of the spectrum of  $A$ . The spectral representation theorem is also obtained by applying the spectral representation theorem for bounded positive transformations to the field of the spectrum of  $A$ .

P. R. Halmos (Chicago, Ill.).

Source: Mathematical Reviews,

Vol. 8, No. 5

57 NAGY BEKA

v. Sz. Nagy, Béla. Approximation der Funktionen durch  
die arithmetischen Mittel ihrer Fourierschen Reihen.  
Mat. Fiz. Lapok 49, 123-138 (1942). (Hungarian. German  
summary)  
The results of this paper are in essence contained in  
another paper by the same author [Acta Univ. Szeged.  
Sect. Sci. Math. 11, 71-84 (1946); these Rev. 8, 150].  
O Szisz (Cincinnati, Ohio).

Source: Mathematical Reviews,

Vol 8, No. 5

sz. NAGY, BÉLA

v. Sz. Nagy, Béla. Approximation der Funktionen durch  
die geometrischen Modelle ihrer Ableitungen.

4

Mathematische Annalen 1930, 101, 17-18  
On the approximation of functions by means of their derivatives.  
Concerning the approximation of functions by means of their derivatives,  
particularly for the class of functions whose first is bounded  
in absolute value by a constant independent of the point of application.  
This solution is extended and generalized.

Mathematische Annalen 1930, 101, 19-22  
Über die Approximation von Funktionen durch ihre Ableitungen.  
Über die Approximation von Funktionen durch ihre Ableitungen.

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NAGY, DE. 52. BEIR.

385  
... May 1948, p. 100, in French. Bound in linear trans-

... 1948, p. 100, in French. Bound in linear trans-

... 1948, p. 100, in French. Bound in linear trans-

... 1948, p. 100, in French. Bound in linear trans-

Source: Mathematical Reviews. 1948, Vol. 9, No. 4

Source

Sz-Nagy, B.

Spuren des U-2 Nagy, B. Die Verallgemeinerung der

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Source: National

"APPROVED FOR RELEASE: 08/31/2001

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APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0"

Sz.-NAGY, BÉLA

600

(Sz.-Nagy, Béla. Méthodes de sommation des séries de Fourier. III. Acta Univ. Szeged. Sect. Sci. Math. 13, 247-251 (1950).

The author establishes necessary conditions in order that the means  $\sigma_n(f; x)$  [see the preceding review] be equiconvergent with the  $(C, 1)$  means

$$\sum_{k=1}^n (1 - \frac{k}{n})_+ (n+1)_+ a_k \sin kx + b_k \cos kx.$$

for every continuous  $f$ . These conditions are condition (1) of the preceding review, condition (2) there, with the sign of  $a_k$  and  $b_k$  interchanged, and condition (3) of the preceding review, with the sign of  $b_k$  interchanged.

Source: Mathematical Reviews,

Vol 12 No. 8

S2-Nagy, Béla

S2-Nagy, Béla. Méthodes de sommation des séries de

In article the Fourier series of a function  $f$  is expressed as

$$\sigma_n(f, x) = \sum_{k=1}^n a_k f_k(x),$$

where  $a_k = \frac{1}{\pi} \int_{-\pi}^{\pi} f(x) e^{-ikx} dx$ . The series  $\sigma_n(f, x)$  is called the sum of the series conjugate to the Fourier series of  $f$ , it converges to

$$\sigma(f, x) = \frac{1}{\pi} \int_{-\pi}^{\pi} f(x) \exp(-ixt) dt = \sum_{k=-\infty}^{\infty} b_k e^{ikt},$$

at each point  $x$  at which the latter converges, i.e. which is also a Lebesgue point of  $f$ . The author shows that for  $A$  the set of all  $x$  such that  $\sigma(f, x) \neq f(x)$  has measure zero for every  $L^1$  of  $K$  in  $L^1$ .

$$\begin{aligned} b_k &= \sum_{n=1}^{\infty} (-1)^{k+1} \left( \log \frac{n}{k+1} \right) \omega_{nk} \\ &= \sum_{n=1}^{n_0-1} (-1)^{k+1} \left( \log \frac{n}{n-k} \right) \omega_{nk} + O(1), \end{aligned}$$

where  $\omega_{nk} = \int_{-\pi}^{\pi} e^{inx} d\lambda_k(x)$ ,  $\lambda_k$  is a regular complex measure on  $A$ ,  $A$  is a Banach limit on  $L^1$ .

Source: Mathematical Reviews,

Vol. 12 No. 8

1. Sz-Nagy, Béla

Sz.-Nagy, Béla. Sur l'ordre de l'approximation d'une fonction par son intégrale de Poisson. Acta Math Acad. Sci. Hungar. 1 183-188 1950. French. Russian summary.

Let  $f(x)$  denote the class of functions  $f(x)$  of period  $2\pi$  satisfying the inequality  $|f(x_1) - f(x_2)| \leq M|x_1 - x_2|$ . Let  $\tilde{f}(x)$  be the function conjugate to  $f(x)$ , and  $0 < \alpha \leq 1$ . Let  $\pi(x)$  be the function Poisson integral of  $f(x)$ . Finally let

$$\pi(x, \alpha) = \sup_{t \in \mathbb{R}} \max_{x \in \mathbb{R}} |\pi_t(x) - \tilde{f}(x)|.$$

for all  $t \in \mathbb{R}$ . The author shows that

$$\pi(x, \alpha) = 2^\alpha \csc(\frac{\pi}{2}\alpha) |x|^{1-\alpha} e^{-x^2/2} \quad (0 < \alpha \leq 1).$$

[Compare also, I. P. Natanson, Doklady Akad. Nauk SSSR (N.S.) 72, 11-14 (1950); these Rev. 11, 655.]  
A Zygmund (Chicago, Ill.).

ZM

Source: Mathematical Reviews,

Vol 13 No. 6

*Notes on the series* Méthodes de sommation des séries de Fourier. Acta Sci. Math. Szeged 1, 1928. L'origine de l'épreuve de Riesz. Méthode LXX utilisée dans diverses méthodes B.

Si  $\sum a_n e^{inx}$  converge à la limite  $A$  et si  $a_n \rightarrow 0$ , alors  $A = \lim_{n \rightarrow \infty} a_n e^{inx}$ . Si  $a_n$  sont des nombres complexes, il faut que  $a_n$  soit de type  $R$ .

$$\sum A_k e^{-ikx} + \sum b_k \sin kx + c_k \cos kx$$

On suppose que  $c_k = \sigma(A_k)$ ,  $b_k = \frac{1}{2}(A_{k+1} - A_{k-1})$ . Si  $\sum a_n e^{inx}$  converge au sens de Lebesgue pour tout  $x$ , alors la somme de convergence est très étroite. Il existe un théorème de Paley qui montre que si  $\sum a_n^2$  converge, alors la somme de convergence est très étroite. C'est ce qu'a démontré Paley et Wiener [Trans. Amer. Math. Soc. 34, p. 763].

Le théorème de Paley et Wiener a été démontré par Paley et Wiener [J. Math. Phys. 12, p. 341 (1948) (thèse de Paley)].

La somme de convergence est très étroite. La somme de convergence est très étroite.

$$\left| \sum A_k e^{-ikx} + \sum b_k \sin kx + c_k \cos kx \right| \leq \sum |A_k| + \sum |b_k| + |c_k|$$

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Source: Mathematical Reviews

7-11-14

SZÖKEFALVI-NAGY, BÉLA

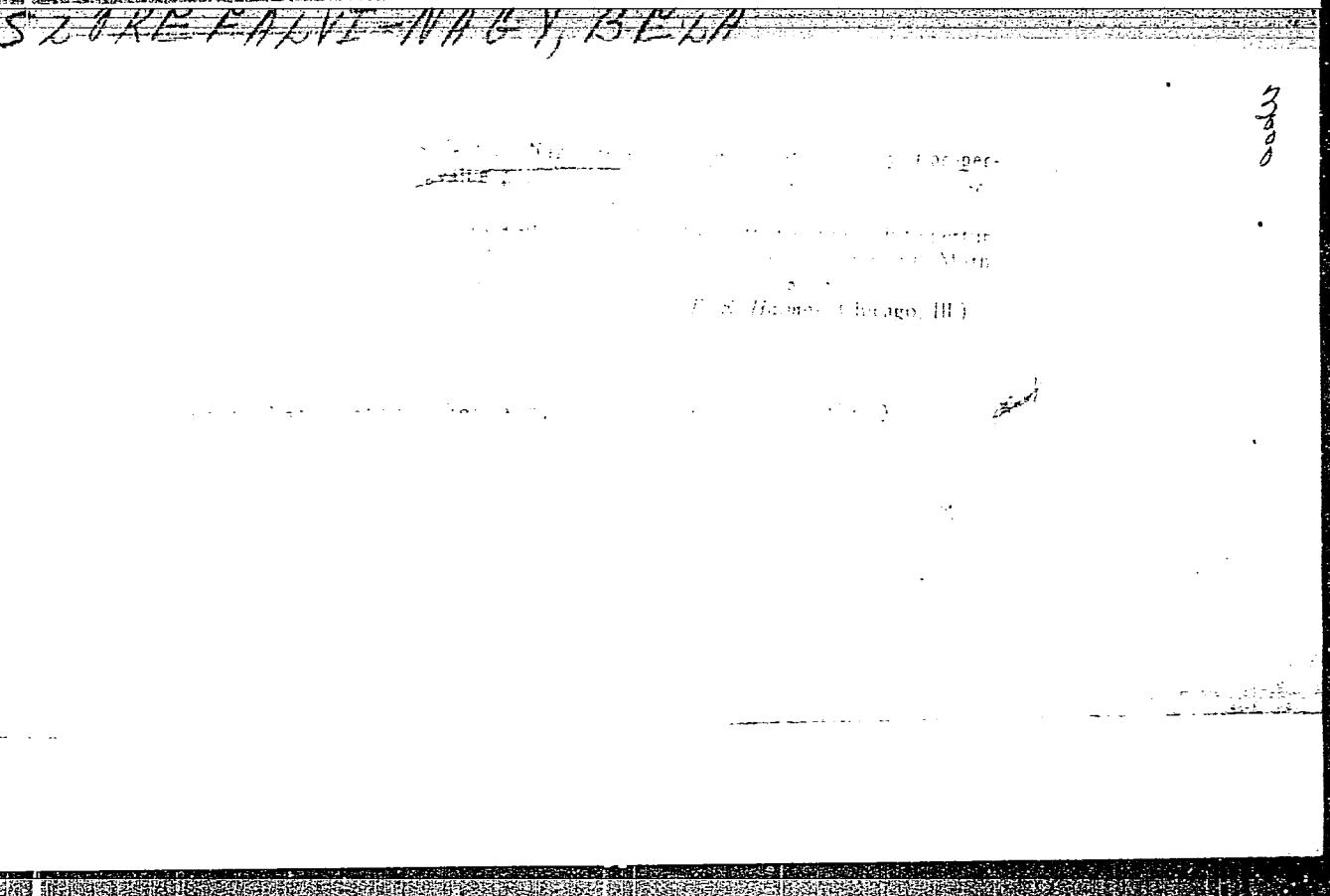
Szökefalvi-Nagy, Béla. The mathematical œuvre of F.  
Riesz. Mat. Lapok 1, 170-182 (1950). (Hungarian.  
Russian and English summaries)

Source: Mathematical Reviews,

Vol 12 No. 1

"APPROVED FOR RELEASE: 08/31/2001

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APPROVED FOR RELEASE: 08/31/2001

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SZKEFALVI-NAGY, BELA

Szkefalvi-Nagy, Béla. Résultats sur la théorie des graphes et de l'analyse fonctionnelle. [Paris]: Gauthier-Villars, 1963.

Source: Mathematical Reviews, Vol. 13 No. 1

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0

Sz-Nagy, Bela

Nagy, Bela Über die Konvergenz von Reihen orthogo-

nal polynomialem Charakter

1944  
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APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0"

Sz.-Nagy, Béla: Perturbations des transformations linéaires fermées. Acta Sci. Math. Szeged 14, 125-137 (1951).

Let  $T: E \rightarrow M$  where  $E$  is a distributive closed operation in a dense domain  $D$  of the Banach space  $B$  to  $B$ . If  $\lambda$  is in the spectrum of  $T$ , then its principal multiplicity is the dimension of the subspace spanned by the solutions of  $(T - \lambda I)x = 0$ . Suppose  $I = I_E$  and  $T(x)$  is the one-dimensional series  $\sum_{k=1}^{\infty} \alpha_k x_k$  where  $x_k$  is the observation of  $x$  at  $k$ -th position.  $\alpha_k$  is referred to the  $k$ th root of a system of equations  $\alpha_1 x_1 + \dots + \alpha_n x_n = 0$  and  $f(x)$ . The author calculated the principal multiplicity of  $\lambda$  and yields a theorem on the perturbations of the eigenvalues and eigenvectors of the principal multiplicity. There are certain analogies to results for non-symmetric operators in Hilbert space. For a principal multiplicity larger than 1 the theorem need not be true and a simple example is given of a perturbation which does not change the eigenvalues in neighborhood of  $\lambda$ .

P. D. Raman, Reviewer, University of Illinois.

Source: Mathematical Reviews, Vol 13 No.9

SZ.-NAGY, BéLA: Perturbations of Closed Linear Transformations

JRW

SZ.-NAGY, Béla

Atkinson, F.V. A spectral problem for completely continuous operators.  
 Acta Math. Acad. Sci. Hungar. 3, 53-60 (1952). (Russian summary)

Sz. Nagy, Béla. On a spectral problem of Atkinson.  
 Acta Math. Acad. Sci. Hungar. 3, 61-66 (1952). (Russian summary)

These two papers each give a proof of the fact that if  $v_r$ ,  $r=1, \dots, n$ , are  $n$  completely continuous transformations on a linear normed complete space to the same space, then the characteristic values of the transformation  $T(\lambda) = I + \sum_{r=1}^n \lambda^r v_r$  (the values of  $\lambda$  for which  $T(\lambda)f=0$  has non-trivial solutions) are isolated in the  $\lambda$ -plane. Atkinson's proof depends on the fact that if  $\lambda = \lambda_0$  is a characteristic value, then there exists a  $p$  such that for  $0 < |\lambda - \lambda_0| < p$  the (finite) dimension of the null spaces corresponding to  $T(\lambda)$  remains constant in  $\lambda$ . Sz.-Nagy rests his proof on the fact that  $(2\pi i)^{-1} \int_C (I-zT)^{-1} dz$ , where  $C$  is a closed curve in the  $z$ -plane at all points of which the inverse of  $I-zT$  exists, defines a projection for each such  $C$ . He proves the lemma: If  $s_0, s_1, \dots, s_n, \dots$  are linear transformations such that  $s_0$  is completely continuous and there exists an  $a$  such that  $\|s_n\| \leq a^n$ , then, for any  $\lambda$ , there exists an  $\epsilon$  sufficiently small such that the spectrum of  $s_0 + \sum_{n=1}^{\infty} \epsilon^n s_n$  in the  $\epsilon$ -neighborhood of  $\lambda$  is determined by a matrix of finite order whose elements  $c_{ik}(\epsilon)$  are analytic

SZ.-NAGY, Bela

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in  $\varepsilon$ . He can then show that the finite part of the derived set of the characteristic values of  $T(\lambda)$  is both open and closed.

T.H.Hildebrandt.

SO: Mathematical Review, Vol. 14, No. 5, May 1953, pp. 439-522.

SZ.-NAGY, Bela

Mathematical Reviews  
Vol. 15 No. 2  
Feb. 1954  
Analysis

Riesz, Frédéric, et Sz.-Nagy, Béla. *Leçons d'analyse fonctionnelle*. 2ème éd. Akadémiai Kiadó, Budapest, 1953. viii+455 pp. 100 ft.

This edition differs from the first only in correction of known misprints and errors, rewriting of parts of certain sections (e.g., §§17, 22, 138, 139, 142, 152), an added new section (§143) in chapter X, and additions to the bibliography [cf. these Rev. 14, 286].

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0

SZ.-NAGY, Déla.

Conjugate cones in Hilbert space. Usp. mat. nauk 8 no.5:167-168 S-0 '53.  
(MLRA 6:10)  
(Spaces, Generalized)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0"

SZ.-NAGY, BELA

Mathematical Reviews  
 Vol. 15 No. 2  
 Feb. 1954  
 Analysis

Sz.-Nagy, Béla. Approximation properties of orthogonal expansions. Acta Sci. Math. Szeged 15, 31-37 (1953).

Let  $C_{ra}$  ( $r=0, 1, 2, \dots; 0 < \alpha \leq 1$ ) be the class of  $r$  times differentiable functions on  $[0, 1]$  for which  $f^{(r)}$  satisfies a Lipschitz condition of order  $\alpha$ , and set

$$N_{ra}(f) = \sup \frac{|f^{(r)}(x) - f^{(r)}(t)|}{|x-t|}.$$

Extending a method previously used by the reviewer [Duke Math. J. 19, 1-4 (1952); these Rev. 13, 646], the author obtains the following lower bounds for the approximation of  $f$  by its Fourier series in the  $L^p$ -norm ( $1 \leq p \leq \infty$ ): Let  $\{\varphi_i\}$  be any orthonormal set on  $[0, 1]$ , let  $\{\lambda_{ni}\}$  be a set of numbers such that  $|\lambda_{n1}|^2 + \dots + |\lambda_{nn}|^2 \leq n$ , let  $s_n(f) = \sum_{i=1}^n \lambda_{ni} c_i \varphi_i(x)$ , where  $c_i = (f, \varphi_i)$ , and put

$$\rho_n(r, \alpha, p) = \sup \frac{\|f - s_n(f)\|_p}{N_{ra}(f)} \quad (0 < N_{ra}(f) < \infty).$$

Then there exist positive constants  $\gamma_{ra}$  such that

$$\rho_n(r, \alpha, p) \geq \gamma_{ra} n^{-r-\alpha}.$$

Without further restrictions on  $\lambda_{ni}$ , the result is best possible; this is also true if  $\lambda_{ni} \equiv 1$  and  $r=0$ ; the case  $\lambda_{ni} \equiv 1$ ,  $r>0$  is left open. If  $N_{ra}(f)$  is replaced by the modulus of continuity of  $f^{(r)}$ , an analogous result is obtained.

W. Rudin (Rochester, N. Y.).

Sz-NAGY, Bela

(2)

Sz-Nagy, Béla. Sur les contractions de l'espace de Hilbert. Acta Sci. Math. Szeged 15, 87-92 (1953).

Let  $T$  be a contraction in the Hilbert space  $X$ . There is a Hilbert space  $Y$  containing  $X$  as a subspace and a unitary transformation  $U$  in  $Y$  such that  $T^k = PU^k$ ,  $(T^k)^* = PU^{-k}$  ( $k = 0, 1, 2, \dots$ ) where  $P$  is the orthogonal projection of  $Y$  onto  $X$ . The theorem has an analogue for one-parameter groups of contractions. From this theorem and the spectral theorem one can readily prove the following theorems concerning a contraction  $T$  on Hilbert space  $X$ : (i) (F. Riesz-B. Sz-Nagy) Every element invariant under  $T$  is also invariant under its adjoint. (ii) The mean ergodic theorem of von Neumann. (iii) (von Neuman-E. Heinz). If  $u(z)$  is holomorphic for  $|z| \leq 1$  then  $u(T)$  is a contraction.

N. Dunford (New Haven, Conn.).

Mathematical Reviews  
Vol. 15 No. 4  
Apr. 1954  
Analysis

Sz.-Nagy, Béla

Sz.-Nagy, Béla. Transformations de l'espace de Hilbert,  
fonctions de type positif sur un groupe. Acta Math.

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MATH 15, 1941, p. 155-184.  
Let  $\{T_\gamma\}$  be a family of linear bounded operators on a real or complex Hilbert space  $H$  where  $T_\gamma$  depends upon a variable element  $\gamma$  of a group  $\Gamma$ . In particular, if  $e$  is the unit element of  $\Gamma$  then  $T_e = I$ . Suppose that  $T_\gamma$  is a function of positive type on  $\Gamma$  in the sense that

$$T_{\gamma^{-1}} = T_\gamma^*, \quad \sum_{\gamma, \delta \in \Gamma} (T_\gamma^{-1} g_\gamma, g_\delta) \geq 0$$

for every set of elements  $g_\gamma$  in  $H$  such that  $g_\gamma = 0$  except for a finite number of  $\gamma$ 's. Suppose also that  $T_\gamma$  is weakly continuous in  $\gamma$ . Then there exists a Hilbert space  $H$  of which  $H$  is a subspace and a family of unitary operators  $U_\gamma$  in  $H$ , forming a strongly continuous representation of  $\Gamma$ , such that  $T_\gamma = P U_\gamma$ , where  $P$  is the orthogonal projection of  $H$  onto  $H$ . Then  $H$  and  $U_\gamma$  are determined up to an isomorphism by the requirement that  $U_\gamma f$  shall span  $H$  for  $f \in H$ ,  $\gamma \in \Gamma$ . In particular, if  $T$  is a contraction in  $H$  and  $T_n = T^*$  for  $n \geq 0$  and  $T_n = (T^*)^{1/n}$  for  $n \leq -1$ , then  $T_n$  is of positive type on the additive group of integers. Similarly, if  $\{T_t | 0 \leq t < \infty\}$  is a weakly continuous semi-group of contractions in  $H$  and  $T_t = T_{-t}^*$  for  $t < 0$ , then  $T_t$  is of positive type on the additive group of reals. The conclusion concerning the representation of  $T_\gamma$  in these two special cases had been proved by the author by other methods in a recent paper [same Acta 15, 87-92 (1953); these Rev. 15, 326].

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52-11487, B61a.

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He also obtains a theorem of M. A. Neumark as a special case (a family  $\{F_\lambda\} - \infty < \lambda < +\infty\}$  of bounded selfadjoint transformations such that  $F_\lambda \leq F_\mu$  for  $\lambda < \mu$ ,  $F_{\lambda+0} = F_\lambda$ ,  $F_\lambda \rightarrow 0$  when  $\lambda \rightarrow -\infty$  and to  $I$  when  $\lambda \rightarrow +\infty$  may be represented as  $F_\lambda = PE_\lambda$  where  $E_\lambda$  is a spectral family of projections in a space  $H$  containing  $H$  as a subspace and  $P$  is the projection on  $H$ ). The first special case admits of a partial extension to an arbitrary real or complex Banach space: If  $T$  is a contraction in a  $(B)$ -space  $B$  there exists another  $(B)$ -space  $B$  admitting  $B$  as a subspace and an isometric transformation  $U$  of  $B$  onto  $B$  such that  $T^n f = P U^n f$  for every  $f \in B$ ,  $n = 0, 1, 2, \dots$ , where  $P$  is the parallel projection of  $B$  onto  $B$  of norm one.

E. Hille (New Haven, Conn.)

NAGY, BELA SZ.

Extensions of the transformations of Hilbert space which leave this space; and appendix  
to the book Lessons in Functional Analysis. In French. bibl. 35 p. 1955 Budapest.

RFB Not in DIC

SO: Monthly List of East European Accession (EEAL) LC. Vol. 6, no. 7, July 1957. Uncl.

*Riesz, Frigyes, and Sz.-Nagy, Béla.* Functional analysis.

sis. Translated by Leo F. Boron. Frederick Ungar Publishing Co., New York, 1955. xii + 468 pp. \$10.00. NS  
Translation of the authors' *Leçons d'analyse fonctionnelle*, 2d ed. [Akadémiai Kiadó, Budapest, 1953; MR 15, 132].

I-F/W

(1)

*Smart good*

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0

QZ-NHGY BELA

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0"

~~Linear operators in Hilbert space with applications~~  
discussed by the author is given on pp. 166-167.

Author's summary.

Sz-NAGY, B.

Sz-Nagy, B. et Korányi, A. Relations d'un problème de Nevanlinna et Pick avec la théorie des opérateurs de l'espace hilbertien. Acta Math. Acad. Sci. Hungar. 7 (1956), 295-303. (Russian summary)

I-FW

The authors give a new proof of the classical Nevanlinna-Pick theorem based on methods of functional analysis. The methods yield the following interesting analogue in the theory of linear transformations. For each  $s$  belonging to some set  $S$  in  $\mathbb{C}^n$ , let  $F(s)$  be a bounded

operator in  $L^2(\mathbb{C}^n)$  satisfying the condition that  $F(s)$  is a unitary operator if and only if  $s \in S$ .

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0

SZ-NAGY, B.

RECORDED AND RECORDED CONTINUOUS AND WHOLE  
BY TELETYPE UNIT - DETAILS OF KUBA AND SOVIET

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0"

Sz.-Nagy B6a. Fortsetzungen linearer Transformationen  
des Hilbertschen Raumes mit Austritt aus dem Raum.

T-FW

Sch. Forschungsinst. Math. I (1957), 259-302.  
Let  $H$  be a Hilbert space and  $T$  a bounded linear operator over  $H$ . Let  $H'$  be a Hilbert space containing  $H$ . In recent years a number of theorems have been proved which under certain conditions on  $T$  express  $T$  as a restriction to  $H$  of an operator of the form  $PS$ , where  $S$  is an operator of some restricted type (self-adjoint, unitary, normal, etc.) on  $H'$ , and  $P$  is the projection of  $H'$  onto  $H$ . This allows one to investigate spectral representations of operators  $T$  of more general type than those usually considered. The author discusses a number of known theorems of this type and shows that they can all be deduced as special cases of the following general theorem. Let  $\Gamma$  be a semigroup with unit  $e$  (a semigroup with an involution  $*$  such that  $y^{**} = y$ ,  $y^*y^*y^* = (yy)^{**}$ ), and let  $\{T_\xi\}_{\xi \in \Gamma}$  be a family of bounded linear operators satisfying (a)  $T_e = I$ ; (b)  $T_{\xi^*} = T_\xi^*$ ; (c)  $\sum_\eta (T_\xi^* g_\eta, g_\xi) \geq 0$  for every family of elements  $\{g_\xi\}_{\xi \in \Gamma}$ , where  $g_\xi = 0$  for all but a countable family of  $\xi \in \Gamma$ ; (d) for every family  $\{g_\xi\}$  of the type in (c) and for every  $\alpha \in \Gamma$ .

$$\sum_\xi \sum_\eta (T_\xi^* g_\alpha, g_\xi) \leq C_\alpha^2 \sum_\xi \sum_\eta (T_\xi^* g_\eta, g_\xi)$$

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*Sz.-Nagy, Béla*

*3  
I-FW*

for some  $C_\alpha > 0$ . Then there exists a Hilbert space  $H' \geq H$  and a family of bounded linear operators  $\{D_\xi\}_{\xi \in \Gamma}$  on  $H'$  satisfying  $D_\xi = I$ ,  $D_{\xi\eta} = D_\xi D_\eta$ ,  $D_{\xi^*} = D_\xi^*$ , and such that  $T_\xi = P D_\xi$  for all  $\xi \in \Gamma$ . The space  $H'$  can be taken as minimal and in this case we have also (1)  $\|D_\alpha\| \leq C_\alpha$ , (2) if  $T_{\xi\eta} = T_{\xi\beta\gamma} + T_{\xi\gamma\eta}$  for fixed  $\alpha, \beta, \gamma$  and all  $\xi, \eta \in \Gamma$  then  $D_\alpha = D_\beta + D_\gamma$ , (3) if  $T_{\xi\alpha\eta} \rightarrow T_{\xi\alpha\eta}$  weakly for all  $\xi, \eta \in \Gamma$  and  $\limsup_n C_{\alpha_n} < \infty$  then  $D_\alpha \rightarrow D_\alpha$  weakly.

R. E. Fullerton (College Park, Md.)

*3/2*

*STW*

Szökefalvi-Nagy, Béla. On weakly convergent sequences of normal transformations in Hilbert space. Magyar Tud. Akad. Mat. Fiz. Oszt. Közl. 7 (1957), 295-303. (Hungarian)

[Editor's note: The French version of this article has already been reviewed: Acta Math. Acad. Sci. Hungar. 8 (1957), 295-302; MR 20 #223.]

Let  $\mathfrak{B}$  be the set of bounded linear operators on a Hilbert space  $\mathfrak{H}$ , of arbitrary infinite dimensionality. For  $B_n, B \in \mathfrak{B}$  write  $B_n \rightarrow B$  if  $(B_n f, g) \rightarrow (Bf, g)$  for any  $f, g \in \mathfrak{H}$ . Then for a contraction  $T \in \mathfrak{B}$ , so that  $\|T\| \leq 1$ , there is a sequence of unitary transformations  $U_k \rightarrow T$  as  $k \rightarrow \infty$ ; the same result with a weaker topology is due to P. R. Halmos [Summa Brasil. Math. 2 (1950), 125-134; MR 13, 359]. Moreover the  $U_k$  can be chosen so that they are unitarily equivalent, and so that  $U_k^n \rightarrow T^n$  for  $n=1, 2, \dots$ . There is a similar result on the approximation to a semi-group of contractions  $T(s)$ , weakly continuous in  $s$  and such that  $T(s) \rightarrow I$  as  $s \rightarrow 0$ , by a sequence  $U_k(s)$ , strongly continuous in  $s$ . The corresponding result for the approximation to self-adjoint transformations  $A$  by sequences of projections  $E_k$  is given in terms of resolutions  $E_k(\lambda)$  of the identity. Finally the author gives necessary and sufficient conditions for an  $S \in \mathfrak{B}$  to be subnormal, i.e., to admit a bounded normal extension on to an

JW  
2/2

there must be an approximating sequence of normal operators  $N_k \rightarrow S$ , the approximation holding also for powers and for adjoints, so that  $N_k^{*m} N_k^n \rightarrow S^{*m} S^n$ .

F. V. Atkinson (Canberra)

*Sommer*

Sz.-Nagy, Béla. Suites faiblement convergentes de transformations normales de l'espace hilbertien. Acta Math. Acad. Sci. Hungar. 8(1957), 295-302.

Let  $H$  be a complete inner-product space of any dimension and let  $B$  be the algebra of bounded linear operators on  $H$ . If  $E \subset B$ , let  $\bar{E}$  be the weak closure of  $E$  and  $\tilde{E}$  be the set of limits of weakly convergent sequences from  $E$ . Von Neumann [Math. Ann. 102 (1929), 370-427] showed that generally  $\tilde{E}$  is smaller than  $\bar{E}$ . Let  $E_T$  be the set of all operators of norm  $\leq 1$ , let  $E_U$  be the set of unitary operators, let  $E_A$  be the set of operators between 0 and 1, and let  $E_P$  be the set of orthogonal projections in  $B$ . Halmos [Summa Brasil. Math. 2 (1950), 125-134; MR 13, 359] proved that  $E_T = \bar{E}_U$  and  $E_A = \bar{E}_P$ . The author proves in this note that  $E_T = \tilde{E}_U$  and  $E_A = \tilde{E}_P$ ; he gives some extensions of this and applications to subnormal operators and \*-semigroups of operators.

M. M. Day (Urbana, Ill.)

JW  
1/1

Sz.-Nagy, Béla. Sur les contractions de l'espace de Hilbert. II. Acta Sci. Math. Szeged 18 (1957), 1-14.

Let  $H$  be a Hilbert space and let  $T$  be a contraction, i.e., a bounded linear operator on  $H$  with  $\|T\| \leq 1$ . The author has previously shown [same Acta 15 (1953), 87-92; MR 15, 326] that there exists a larger Hilbert space  $K$ ,  $H \subset K$ , and a unitary operator  $U$  on  $K$  such that  $T^{(n)} = U^{(n)}$ ,  $n=0, \pm 1, \pm 2, \dots$ , where  $K$  is determined by the elements  $\{U^n h\}$ ,  $h \in H$  and  $U$  is determined in a unique manner. In the present paper a new proof of a theorem of Schreiber [Duke Math. J. 23 (1956), 579-594; MR 18, 748] is given. Let  $T$  be a proper contraction (i.e.  $\|T\| < 1$ ). Then the transformation  $U$  is unitarily equivalent to the  $d$ -fold

orthogonal sum of the unitary operator  $V[u(\varphi)] = e^{i\varphi} u(\varphi)$ , where  $U \in L^2(0, 2\pi)$  and where  $d$  is the dimension of  $H$ . The method of the author is more general than that of Schreiber in that it is not restricted to the case  $d \leq \aleph_0$ . A generalization is also given in which a similar representation theorem is given for a one-parameter semigroup,  $T(s)$ , of proper contractions. In this case the representation yields a  $d$ -fold orthogonal sum of the one-parameter group  $V(s) : L^2(-\infty, \infty) \rightarrow L^2(-\infty, \infty)$  where  $V(s)[u(\varphi)] = e^{is\varphi} U(\varphi)$ .

R. E. Fullerton (College Park, Md.)

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Card 1/1

*Z*

*Sz.-Nagy, Béla. Note on sums of almost orthogonal operators.* Acta Sci. Math. Szeged 18 (1957), 189-197.  
The author gives a very simple proof of the following theorem due to the reviewer [Revista Mat. Cuyana 1 (1955), 41-55; MR 18, 219], whose proof was based on a rather complicated combinatorial problem: Let  $T_1 + \dots + T_n$  be a sum of permutable Hermitian operators on Hilbert space, satisfying the conditions  $\|T_i\| \leq 1$ ,  $\|T_i T_j\| \leq e^{t-j}$ , where  $0 \leq t < 1$ . Then  $\|T_1 + \dots + T_n\| \leq c(t)$ . The author gives in addition the estimate  $(1+t)/(1-t) \leq c(t) \leq (1+t^2)/(1-t)$ . The proof is based on the following numerical lemma: if  $s = v_1 + \dots + v_n$  is a sum of real numbers such that  $|v_i| \leq 1$ ,  $|v_i v_j| \leq e^{t-j}$ , then  $|s| \leq c(t)$ .

*M. Collar (St. Louis, Mo.)*

Nagy, B.

16(1) PHASE I BOOK EXPLOITATION

SOV/2660

Trudy. T. 4: Kratkoye soderzhanie sektsionnykh dokladov. Doklady Inostrannyykh uchenykh (Transactions of the 3rd All-Union Mathematical Conference in Moscow, Vol. 4; Summary of Foreign Scientists). Moscow, Izd-vo AN SSSR, 1959. 247 p. 2,200 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Matematicheskiy institut.

Tech. Ed.: G.N. Shevchanko; Editorial Board: A.A. Abramov, V.G. Boltyanskiy, A.M. Vasil'ev, B.V. Medvedev, A.D. Myshkis, S.N. Nikol'skiy (Resp. Ed.) A.G. Postnikov, Yu. V. Prokhorov, K.A. Rybnikov, P.L. Ul'yanov, V.A. Gasparskiy, N.G. Chetayev, D. Ye. Shilov, and A.I. Shirshov.

PURPOSE: This book is intended for mathematicians and physicists.

COVERAGE: The book is Volume IV of the Transactions of the Third All-Union Mathematical Conference, held in June and July 1956. The book is divided into two main parts. The first part contains summaries of the papers presented by Soviet scientists at the Conference that were not included in the first two volumes. The second part contains the text of reports submitted to the Conference by non-Soviet scientists. In those cases when the non-Soviet scientist did not submit a copy of his paper to the editor, the title of the paper is cited and in the paper was printed in previous volume, reference is made to the appropriate volume. The papers, both Soviet and non-Soviet, cover various topics in number theory, algebra, differential and integral equations, function theory, functional analysis, probability theory, topology, mathematical problems of mechanics, physics, computational mathematics, mathematical logic and the foundations of mathematics, and the history of mathematics.

Micalescu, M. (Romania). Problem of the analyticity of functions of many real variables 183

Pavar, J. (France). On one determination of the best constant in the theory of differential equations 183

Aleman, G. (Hungary). On the summability of orthogonal series 183

Section on Functional Analysis

Karoly, (Hungary) and A. Koranzi (Hungary). Operational methods in the theory of complex functions 184

Orlicz, W. (Poland). Sequences of operations which depend

Card 29/34

SZ. -NAGY, B.

Completely continuous operators with uniformly bound iterates. In English. p. 89.

MAGYAR TUDOMANYOS AKADEMIA MATEMATIKAI KUTATO INTEZETENEK KOZLEMENYEI.  
PUBLICATIONS OF THE MATHEMATICAL INSTITUTE OF THE HUNGARIAN ACADEMY OF  
SCIENCES. Budapest, Hungary. Vol. 4, no. 1, 1959

Monthly list of East European Accessions (EEAI). Iw. Vol. 9, no. 1, Jan., 1960.

Uncl.

SZOKEFALVI-NAGY, B. (Szeged)

Address delivered at Stefan Banach's commemorative ceremony. Roczniki  
wiad matem 4 no.3:269-270 '61.

(Mathematicians, Polish)

SZOKFALVI-NAGY, Bela

David Hilbert, January 23, 1862-February 14, 1943. Mat kozl MTA  
12 no.3:203-216 '62.

BOLLOBAS, Bela; MEGYESI, Laszlo; MORICZ, Ferenc; BOROCZKY, Karoly;  
MAKKAI, Mihaly; MALYUSZ, Karoly; SIMON, Laszlo; TUSNADY, Gabor;  
MAKKAI, Mihaly; SZKEFALVI-NAGY, Bela; ACZEL, Janos; HOSSZU-MIKLOS;  
HALASZ, Gabor; KALMAR, Agota; KATAI, Imre; LOSONCZI, Laszlo;  
SZASZ, Domokos

The 1961 Mathematical Contest in Memory of Miklos Schweitzer.  
Mat lapok 13 no.1/2:153-171 '62.

1. "Matematikai Lapok" szerkeszto bizottsagi tagja (for Aczel).

HAJOS, Gyorgy; SURANYI, Janos; FUCHS, Laszlo; ACZEL, Janos; KALMAR, Laszlo; (Szeged)  
SZOKEFALVI-NAGY, Bela (Szeged)

Report on the 5th regular meeting arranged by the Janos Bolyai  
Mathematical Society. Mat lapok 12 no.1/2:127-144 '61

1. President, Janos Bolyai Mathematical Society, and Editor,  
"Matematikai Lapok" (for Hajos). 2. Secretary General, Janos Bolyai  
Mathematical Society (for Suranyi). 3. Editor, "Matematikai Lapok"  
(for Aczel).

SZOKEFALVI-NAGY, Bela (Szeged); FOIAS, Ciprian (Bucharest)

Contraction of Hilber<sup>t</sup> space. Pts.5-6. Acta math  
Szeged 23 no.1/2:106-167 '62.

1. Editor, "Acta Scientiarum Mathematicarum" (for Szokefalvi-Nagy.  
Submitted November 15, 1961.

SZOKFALVI-NAGY, Bela (Szeged); FOIAS, Ciprian (Bucharest)

Remark to the preceding paper of J.Feldman. Acta math Szeged  
23 no.3/4:272-273 '62.

1. Editor, "Acta Scientiarum Mathematicarum" (for Szokefalvi-  
Nagy). Submitted October 24, 1961.

SZÓKEFALVI-NAGY, Bela, akademikus, egyetemi tanár

David Hilbert. Magy tud 69 no.10:629-639 0 '62.

l. Jozsef Attila Tudomanyegyetem, Szeged.

SECRET FACULTY (NATO), Belgrade, Yugoslavia (former SRB)

Contribution to the construction of Belgrade airport, 1963.  
Total value: 14,000,000.00 D.D.U.

I. Project "Construction of Belgrade International Airport" (for Secret Faculty  
NATO), Belgrade, total 10,000 (December 27, 1963).

SZOKFALVI-NAGY, Bela (Szeged); FOIAS, Ciprian (Bucharest)

Contraction of Hilbert space, Pt.9. Acta math Szeged 25 no.3/4:  
283-316 '64.

1. Editor, "Acta Scientiarum Mathematicarum" (for Szokefalvi-Nagy).

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0

SZOKFALVI-NAGY, Gyula

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1962  
/6

Mathematics

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0"

SZOKEFALVI-NAGY, Zoltan, dr.

Visual aids in popularization of chemistry. Term tud kozl ?  
no.1:47 Ja '63.

SZOKEFALVI-NAGY, Zoltan

Chapters from the history of chemistry in Hungary during the  
18th and 19th centuries. Magy kem lap 18 no.10:486-490 0'63.

1. Tanarkezso Foiskola, Eger.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0

SZOKEFALVI-NAGY, Zoltan, dr., foiskolai tanar, kandidatus (Eger)

Ignac Martinovics as a chemist. Term tud kozl 7 no.11:510-512  
N°63.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0"

SZOKEFALVI-NAGY, Zoltan, dr.

The golden age and twilight of the Hungarian chemical language.  
Term tud kozl 8 no. 2: 87-88 F '64.

SZOKEFALVI-NAGY, Zoltan

Ignac Martinovics, work in the field of chemistry. Magy  
kem lap 19 no. 4:200-203 Ap '64.

1. Eger School of Education.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0

SZOKOL, Gyula

A study tour of the Soviet Union by Hungarian aerologists.  
Idojaras 68 no.6:380-381 N-D '64.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0"

KONYA, Laszlo, dr.; SCHNITZLER, Jozsef, dr.; ARANYOSI, Janos, dr.;  
SZOKOL, Matyas, dr.

Leiomyoma of the lung. Tuberkulczis 17 no.7:221-223 Jl '64.

1. A Debrazeni Orvostudomanyi Egyetem Tbc Klinika (mb. igazgato:  
Pongor Ferenc dr. egyetemi docens) Sebeszeti Osztalya (osztaly-  
vezeto: Schnitzler Jozsef dr. egyetemi docens) es Korbonctani  
Intezet (igazgato: Endes Pongrac dr. egyetemi tanar) kozlemenye.

DAUDA, G.; SZOKOL, M.; DEVENYI, I.

Effect of renal medullary extracts on blood pressure of the  
rat. Acta physiol. acad. sci. Hung. 28 no.3:273-276 '65.

I. Department of Pathology, University Medical School,  
Debrecen. Submitted November 20, 1964.

HUNGARY

SZOKOL, Miklos, ENDES, Pongrac; Medical University of Debrecen, Institute of Pathological Anatomy (Debrecenti Orvostudomanyi Egyetem, Korbonctani Intezet).

"Study of the Effect of Prolonged Alimentary Administration of Magnesium on the Juxtaglomerular Granulated Cells of Rats."

Budapest, Kiserletes Orvostudomany, Vol XIX, No 1, Jan 67, pages 105-107.

Abstract: [Authors' Hungarian summary] When administered to albino Wistar rats through a stomach tube for 7 days, daily doses of 0.28 g MgCl<sub>2</sub> in an aqueous solution do not effect any change in the condition of the JGC. This observation is attributed to the possibility that the blood supply conditions of the kidneys were not altered by the magnesium when administered in the manner described. 3 Eastern European, 13 Western references. [Manuscript received 14 May 66.]

1/1

EXCERPTA MEDICA Sec 2 Vol 13/5 Physiology May 60

2381. EXPERIMENTAL INDUCTION OF EOSINOPHILIA BY ACOUSTIC STIMULATION - Hangingerlessel kiváltott kísérleti eosinophilia - Biró J., Szokolai V. and Kovách A. Oryostud, Egyet, Urol, Klin. és Elettani Int. Kózl., Budapest - ORV. HETIL. 1959, 100/20 (1042-1043) Tables 1

An acoustic stimulus lasting 2 min. was used in a study of the activating effects of neurogenic stimuli on the pituitary-adrenal cortex system. It was followed by an increase of the peripheral eosinophil count and a slight decrease of the lymphocyte count and of the adrenal ascorbic acid concentration. In the presence of other signs characteristic of stress, the development of eosinophilia is indicative of a specific effect of the audiogenic stimulus on the number of eosinophils, i.e. the stimulus results in an eosinophilia instead of the usual eosinopenic response to stressor action.

BIRO, J.; SZOKOLAI, V.; FACHET, J. with the technical assistance of  
Agnes Bodolay-Varga

Effect of the removal of endocrine glands on audiogenic eosinophilia.  
Acta physiol. hung. 18 no.4:283-289 '61.

1. Department of Urology and Institute of Physiology, Medical University, Budapest.

(EOSINOPHILIA exper)  
(ENDOCRINE GLANDS physiol)

BIRO, J.; SZOKOLAI, Vera; FACHET, J.

Experimental production of acute eosinophilia. Acta physiol. acad.  
sci. hung. 22 no.2:163-169 '62.

1. Department of Urology and Institute of Physiology, Medical  
University, Budapest.  
(EOSINOPHILIA) (LIGHT) (INJECTIONS)

SZOKOLAY, A.

CZECHOSLOVAKIA/Chemical Technology - Chemical Products and  
Their Application, Part 3. - Food Industry.

H-27

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 23143

Author : A. Szokolay, Z. Malkus

Inst : -  
Title : Use of Food Pigments and Their Hygienic Evaluation.

Orig Pub : Ceskosl. hyg., 1957, 2, No 6, 355-365

Abstract : A review concerning the question of cancer causes and other undesirable properties of food pigments. A list of pigments permissible in 8 countries and recommended at 3 international conferences is attached.  
Bibliography with 54 titles.

Card 1/1

SZOKOLAY, A.; MALKUS, Z.

Temporary instructions on the use of food-coloring materials. p. 392.

CESKOSLOVENSKA HYGIENA. Praha, Czechoslovakia. Vol. 4, no. 7, Aug. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 1, January 1960.

Uncl.

SZOKOLAY, A.; RIPPET, A.

Improved methods of distillation in determination of fluorides in foodstuffs. p. 410.

CESKOSLOVENSKA HYGIENA. Praha, Czechoslovakia. Vol. 4, no. 7, Aug. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 1, January 1960.

Uncl.

SZOKOLAY, A.

A conference on foreign matter in foodstuffs held in Smolenice, October 8-10, 1958. p. 434.

CESKOSLOVENSKA HYGIENA. Praha, Czechoslovakia. Vol. 4, no. 7, Aug. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 1, January 1960.

Uncl.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0

SZOKOLAY, A.; GORNER, Fr.

Some problems of food hygiene in rural areas. Cesk. hyg. 7 no.6:  
376-379 Jl '62.

(RURAL HEALTH) (NUTRITION)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0"

SZOKOLAY, A.

Hygienic aspects of food additives. Cesk. hyg. 7 no.6:380-382 J1 '62.  
(FOOD ADDITIVES)

CZECHOSLOVAKIA  
2

SZOKOLAY, A., Engineer; KAMILATHOVA, L., Promovana Physician  
Oblast Institute of Hygiene (Oblastny ustav hygience),  
Bratislava (for both)  
Prague, Umljeticky lekar, No 12, 1963, pp 460-463  
"New Opinions on the Value of Foreign Matter in Food-  
stuffs from Food Hygiene."

HUNGARY

PARAICZ, Ervin, Dr, SZENASY, Jozsef, Dr, SZOKOLAY, Vera, Dr; National Neurosurgical Scientific Institute and Madarasz Utca Children's Hospital, Budapest (Orszagos Idegsebeszeti Tudomanyos Intezet es Ep. Madarasz utcai Gyermekkorhaz).

"The Increase in the Number of Childhood Skull Fractures."

Budapest, Orvosi Hetilap, Vol 104, No 22, 2 June 63, pages 1020-1023.

Abstract: [Authors' Hungarian summary] The authors discuss 5 cases of skull fracture which occurred under 6 months of age, where the fracture increased gradually. This phenomenon is not considered a specific syndrome but a common symptom of various pathomorphological factors. In two of the cases the extracranial cyst contained brain tissue and was in essence a traumatic encephalocele. 19 Western references.

1/1

WOLF,A.; SZOKOLAY,A.

On the problem of food additives. Cesk. hyg. 10 no.3:145-152  
Mv '65.

1. Katedra hygieny lekarske fakulty hygienicke Karlovy Univer-  
sity, Praha ; Vyzkumny ustav hygieny, Bratislava.

MALKUS, Z.; SZOKOLAY, A.

Hygienic problems of dyes used in the food industry. Cesk. hyg.  
10 no.3:163-169 My '65.

1. Ustav hygieny, Praha; Vyzkumny ustav hygieny, Bratislava.  
2. Z.Malkus' address: Praha 10, Srobarova 48

11/17/87

SYNTHOLYI, Iván, Dr., assistant professor (egyelmi tanárszék); University of Veterinary Medicine (Alatátervezői és Gyógyászati Egyetem), Department and Clinic of Surgery and Orthopedics (Sziroszeti és Orvossziszálás) Chairman: S. BOVÁK, András, Dr., university docent (egyetemi tanár), candidate of veterinary medicine.

"Artificial Transposition of the Penis of Bulls, Rams, and Boars."

Jánik et al. Magyar Alatátervezői Lapja, Vol 18, No 1, Jan 63, pp 39-42.

Abstract: (Author's English summary modified) Vasectomized male animals are often used as so-called bioartificial donors in the practice of artificial insemination. Although such animals are incapable of insemination of females, they can contaminate the external female organs with the secretion of their accessory glands and can also transfer sexual infections. A technique of surgical penis transposition is described which diverts the penis 90-95 degrees from its natural direction resulting in the prevention of any introduction of the penis into the vulva without affecting the use of these animals as bioartificial donors. Of nine references, six are Eastern European, the rest is Western.

LL/M

15

SZOKOLOCZY-SYLLABA, Bela, dr.

A new method for extra-oral anesthesia of the mandibular nerve.  
Fogrov. szemle 47 no.5:170-173 May 54.

(DENTISTRY OPERATIVE, anesth. & analgesia  
mandibular nerve block by extra-oral injection)

(ANESTHESIA REGIONAL  
mandibular nerve block in dent. by extra-oral injection)

(NERVES MANDIBULAR  
anesth. block in dent. by extra-oral inject.)

SZOKOLY, Pal

Transistor quick key. Radiotechnika 10 no.1:14.  
Ja '60.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0

SZOKOLY, Pal

Shortwave amateur band receiver. Raditechnika 10 no.4:107-110 Ap '60.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0"

L 37828-66

ACC NR: AP6028497

SOURCE CODE: HU/0018/65/017/006/0656/0658

AUTHOR: Gomba, Szabolcs; Soltész, Margit B.--Sholtes, M. B.; Szokoly, Viktor—  
Sokoli, V.

ORG: Institute of Pathology, Medical University of Debrecen (Debreceni  
Orvostudományi Egyetem, Korbonctani Intézet)

TITLE: Histological examination of sediments obtained by differential centrifugation

SOURCE: Kísérletes orvostudomány, v. 17, no. 6, 1965, 656-658

TOPIC TAGS: histology, sedimentation separation, centrifugation

ABSTRACT: When the sedimentation obtained by differential centrifugation is imbedded with suitable orientation in a piece of tissue and histological slices are made from them, a cross-sectional picture of the sediment will be obtained. The components can be stained by histological, histochemical methods; useful information can be gained in this manner concerning the sedimentation conditions. The method used by the authors is described in detail in the article. Orig. art. has:  
1 figure. [JPRS: 34,161]

SUB CODE: 06 / SUBM DATE: 13Feb65 / ORIG REF: 001 / OTH REF: 004

Card 1/1 MLP

0917 2259

NAGY, Lajos Gyorgy, dr. (Budapest, XI., Budafoki u.8); SZOKOLYI, Laszlo  
(Budapest, XI., Budafoki u.8)

Investigation of some motor oil additives by neutron activation.  
Periodica polytechn chem 8 no.1:41-62 '64.

1. Department of Physical Chemistry, Polytechnical University,  
Budapest. Presented by Prof. Dr. G. Schay.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0

SZOKOWA, CELINA

*Net* High-yield chemicals and atomic bombs.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520016-0"

SZOKUP, L.

SZOKUP, L. 3d Conference of Researchers in the Building Materials Industry;  
opening speech. p.2. Vol. 8, no. 1, Jan. 1956. EPITOANYAG. Budapest, Hungary.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

SZABÓP, L.

Innovator's movement in the construction and building materials industry. p.3.  
MÁJTOK LÁNYA. Vol. 9, no. 1b, Aug. 1957, Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) IC. Vol. 6, no. 12, Dec. 1957,  
Uncl.

SZOKUP, Lajos

The state and tasks of the silicate industry. Epitoanyag  
15 no.2/3:43-47 F-Mr '63.

1. Miniszterhelyettes; Szilikatipari Tudomanyos Egyesulet  
-tarselnöke.

PORSZASZ, J.; BARANKAY, T.; SZOLCSANYI, J.; GIBISZER-PORSZASZ, Katalin;  
MADARSZ, Klara

Studies of the neural connexion between the vasodilatator and vaso-  
constrictor centres in the cat. Acta physiol. acad. sci. hung. 22  
no.1:29-41 '62.

1. Institute of Physiology, Medical University, Szeged.  
(VASOMOTOR SYSTEM)

SZOLCSANYI, PAL.

Raman szinkepelemzes benzineknel; osszefoglalo jelentes.

Veszprem, Hungary, Magyar Asvanyolaj es Foldgaz Kiserleti Intezet,  
1953, 61 p.

Monthly List of East European Accessions, (EEAI) LC, Vol. 8 No. 6 June 1959  
Uncl.

SZOLCSANYI, PAL.

Raman szinkepelemzes benzineknel; osszefoglalo jelentes. 79p.

Veszprem, Hungary 1956

Monthly List of European Accessions (EEAI) LC, Vol. 8, No. 6, June 1959

Uncl.

Distr: 4E3d

✓ Theory of Raman light sources. I. Pal Szolcsányi.  
Magyar Fiz. Polyibrai 4, 127-31 (1958). "Calcs., based  
on geometrical optics, were carried out in order to det. which  
of the existing Raman light sources will reach the cell with  
the greatest utilizable intensity. For the best evaluation  
all the variables were investigated separately. None of  
the light sources used to date give max. efficiency. The best  
results are obtained with the one-lamp elliptic-mirror app.  
A simple app. was built, consisting of a glass cylinder with a  
mirror surface. A cell and a lamp were inserted into the  
cylinder about  $\frac{1}{4}$  way off the radius along the length axis.  
The cell is large enough to absorb most of the light.

E. Rona

SZOLCSÁNYI, P.

4

✓ 2372. Simple Raman apparatus and procedure  
for the analysis of hydrocarbon mixtures. P.

Szolcsányi (Phys.-Chem. Inst. Univ. Chem., Budapest, Hungary). *Magyar Kém. Foly.*, 1958,

62 (1), 7-11. Details are given of a new, simple Raman apparatus, which was developed on the basis of the author's theory of Raman sources.

The 4358-A line of a directly water-cooled 450-W mercury-vapour lamp is used for excitation. The irradiator is a cylindrical mirror; the lamp and the cell are placed along its diameter, at a distance of half a radius from the vertical axis. The windowless cell has a capacity of 5 ml; the light passes out through the free liquid surface. There is no meniscus, as the upper part of the cell is conical. The spectrum is measured with a recording photometer. A semi-quantitative analysis can be made from the height of the maxima, measured by the baseline method. The method is much quicker than the usual procedures, and its accuracy is sufficient for the purpose required.

A. G. PETO

Chem

1

PM

SZOLCSANYI, P.

Theory of fluidized beds. p. 38. (Magyar Kemiai Folyoirat, Vol. 63, No. 1,  
Jan 1957, Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Unclassified.

SZOLCSANYI, PAL

4  
5

27

Oxidation of sulfur dioxide in a fluidized bed with vanadium catalyst. Pal Szolcsányi, László Horváth, and István K. Tóth (Univ. Chem. Ind., Veszprém, Hung.).  
Veszprém Vegyiipari Egyetem Közleményei 2, 57-63(1958).—  
The oxidation of SO<sub>2</sub> with air was studied in a 20-cc. (practically isothermal) reactor, made of quartz, by using a V catalyst (such as employed in H<sub>2</sub>SO<sub>4</sub> manuf.) of 0.78- and 1-mm. particle size, at a gas rate of 0.5-3.5 l/min., and at 450-90°. The initial SO<sub>2</sub> concn. was 2.7-7.0 vol. %, and conversion rates of 10-70% were attained. In a stationary bed the direction of flow (whether up or down) made no difference in the results. On attaining the fluidized state, the activity of the bed increased instantaneously; the extent of the increase became larger with increasing temps. This increase was evident even at the lowest initial SO<sub>2</sub> concn. exampd. The activity increase commenced always at the same feed rate for any given bed, regardless of concn. and temp.

G. J. Ernyei

PF

SZOLCSANYI, PAL

5  
mJC(JD)  
1

Distr: 432c(m)

27  
Decomposition of ammonia in a fluidized bed with iron catalyst. Pal Szolcsanyi, Ferenc Bodó, and Antal Pásztor (Univ. Chem. Ind., Veszprém, Hung.). Veszprém Vegyi-  
pári Egyetem Közleményei 2, 65-S (1958).—The app. de-  
scribed (cf. following abstr.) was used. The catalyst  
employed was Fe, as used in industrial NH<sub>3</sub> synthesis, of  
0.20-mm.-diam. particle size. Feed rates were 0.2-5.0  
l/min., temp. range was 450-500°. The activity of the  
fluidized bed was appreciably larger than that of the station-  
ary bed. In a stationary bed the direction of flow (whether  
up or down) made no difference in the results. The av.  
conversion rate increased with an increasing feed rate. For  
any given bed, a sudden increase in activity occurred al-  
ways at the same feed rate; this coincided with the change  
from the stationary to the fluidized state. G. J. Ernyei

SZOLCSANVI, PA<sup>1</sup>

Distr: 4E2c(m)/4E3d

5  
BRGM  
JAO(NB)  
MJC(JD)

*Hydrogenation of cyclohexane in a fluidized bed with a palladium catalyst deposited on activated carbon. Pál Szolcsányi and Károly Németh (Univ. Chem. Ind., Veszprém, Hung.). Veszprémi Vegyipari Egyetem Közleményei 2, 69-74(1958).—The app. described (cf. preceding abstr.) was used. The catalyst employed was Pd, prep'd. by Sachanen's method (Conversion of Petroleum. Production of Motor Fuels by Thermal and Catalytic Processes, 1948 (CA 43, 2421c)), ptd. on activated C, prep'd. by Pakkendorf's method (cf. P. and Leder-Pakkendorf, CA 28, 67061). Feed rates were 0.20-2.30 ml./min., temp. range was 250-300°. The activity of the bed sharply increased on attaining the fluidized state; however, upon further increasing the feed rate, the activity decreased again, in certain cases below that of the stationary bed. For any given bed, the sharp increase in activity always occurred at the same feed rate. The intersection point of the activity/feed rate curves representing the stationary and the fluidized bed, resp., was at the same location for any given bed. At low feed rates and with stationary beds, the direction of flow (whether up or down) made no difference in the results.*  
G. J. Ernyei

PZ

SZOLCSANYI, PAL

3

7  
Effect of external diffusion upon the kinetic processes in granular beds. Pal Szolcsanyi (Univ. Chem. Ind., Veszprém, Hung.). *Veszprém Vegyi Pári Egyetem Közleményei* 2, 75-84 (1959) (German and Russian summaries).—A math. treatment of the properties of beds composed of spherical particles showed that changes in the velocity of the medium affected the particles in the interior of the bed to a greater extent than those in the zone subject to external diffusion. In the region of  $(D/kh) < 10$  (where  $D$  is the diffusion const.,  $h$  is the thickness of the diffusion film, and  $k$  is the surface velocity const.) this factor affected the effective film resistance of the bed to an appreciable extent. The results of the calcs. confirmed the validity of the theory developed by Krischer and Loos (CA 52, 6862). G. J. Ernyei

H

HUNGARY / Chemical Technology, Chemical Products and Their  
Application. Chemical Engineering

1-2

Abs Jour : Ref Zhur - Khimiya, No 5, 1959, No. 15599

Author : Szolczanyi, P.

Inst : Not given

Title : Bubble Theory of the Formation of Pseudo-Dilute Layers

Orig Pub : Magyar kem. folyoirat, 1958, 64, No 4, 131-136

Abstract : Based on the results of recently conducted experiments, the bubble theory of the formation of pseudo-dilute layers (PL) has been advanced. A certain portion of particles, lifted by the pseudo-diluted phase, tends to settle again at the bottom. In so doing, it forms pores that resemble bubbles in a boiling liquid. The rate of formation of such pores is characteristic of the properties of PL. Based on the above, an equation for the determination of volumetric expansion of PL has been

Card 1/2

SZOLCSÁNYI, P.

Distr: 4E3d

Determination of individual hydrocarbons in the gasoline fraction of Nagyenyel crude oil. Ervin Kerényi and Pál Szolcsányi (Magyar Ásványolaj Földgázkísérleti Intézet, Veszprém-Budapest, Hung.). Magyar Kém. Folyoirat 63, 398-400(1959).—The method proposed for detg. the hydrocarbon compn. of gasoline consists of fractional distn. followed by the detn. of the Raman spectra. The gasoline fraction of Nagyenyel (Hungary) crude oil, studied by this method, was found to consist chiefly of normal paraffins (28.6%) and iso paraffins (62.1%), with n-octane and n-nonane as the most important components. The different fractions showed the same proportions of aromatic compds. with the same C no. and 8-membered cycloparaffins.

E. Bornehmisz

4  
22(NB)

SZOLCSANYI, Pal

Anomaly in the reaction kinetics of fluidized catalyst beds..  
Veszprem vegyip egy kozl 5 no.1:41-46 '61

1. Veszpremi Vegyipari Egyetem Fizikai-kemia Tanszek.

SZOLCSANYI, Pal, kandidatus

Kinetic calculation of the reactors with fluidized catalyst beds.  
Veszprém vegyipari egyetem 5. no. 4:329-337. '61.

1. Veszprémi Vegyipari Egyetem Fizikai-kemia Tanszek.

SZOLCSANYI, Pal, dr.

Reactors with loosened catalyst beds. Veszprem vegyip egy kozl  
3 no.1/4:321-324 '59

1. Veszpremi Vegyipari Egyetem Fizikai Kemia Tanszek.

KERENYI, Ervin; SZOLCSANYI, Pal

Individual hydrocarbon analysis of the benzine distillate of  
the Nagylengyel petroleum. Magy kem folyoir 65 no. 10:395-400  
0 '59.

1. Magyar Asvanyolaj- es Foldgazkiserleti Intezet, Veszprem-  
Budapest.

ALMASY, Gedon, tudomanyos munktars; SZOLCSANYI, Pal

Testing catalyzed water gas reaction. Pt.2. Veszprem vegyip egy  
kozli 5 no.1415-24 '61

1. Magyar Aszanyolaj es Foldgaz Kiserleti Intezet (for Almasy).  
2. Veszpremi Vegyipari Egyetem Fizika-kemia Tanszek (for Szol-  
csanyi).

MAGYAR, Miklos; SZOLCSANYI, Pal; SZABADKA, Odon; TOLL, Laszlo

Testing catalyzed water gas reaction. Pt.l. Veszprem vegyip  
egy kozl 5 no.185-14 '61

1. Veszpremi Vegyipari Egyetem Fizikal-kemia Tanszek.